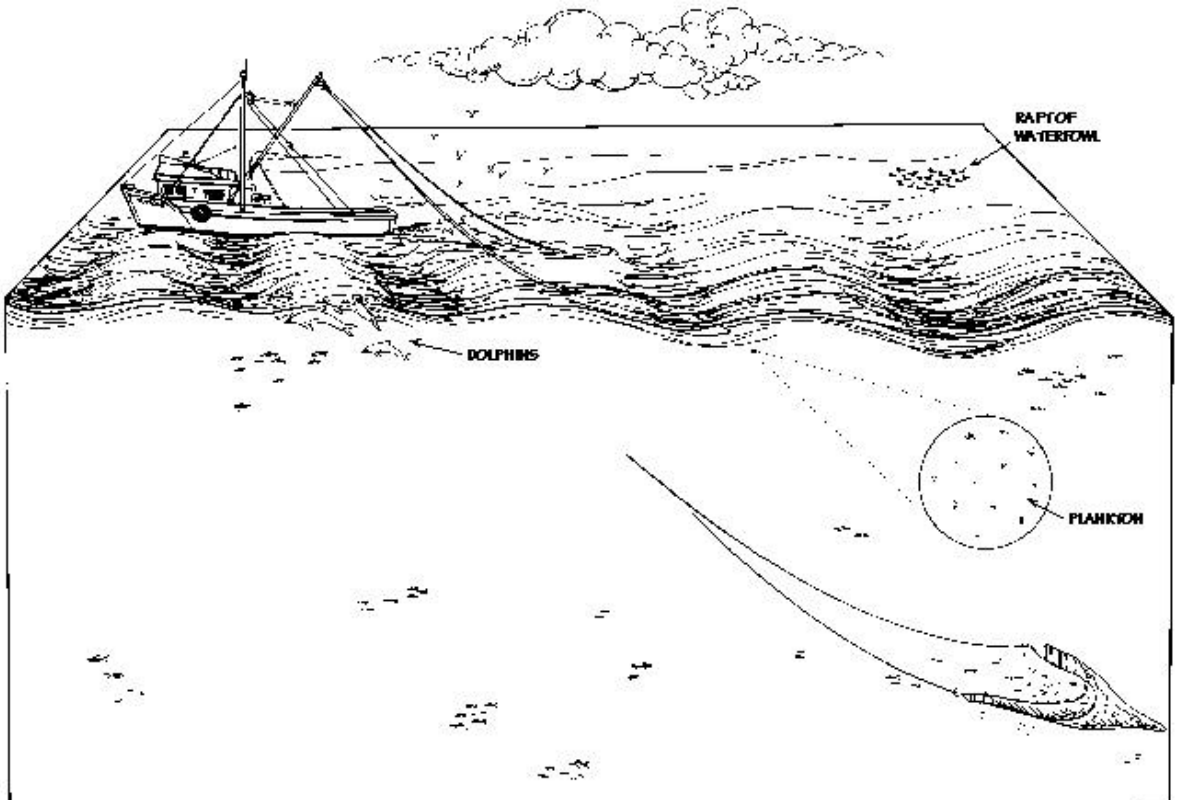
RAFT OF
WATERFOWL
DOLPHINS
PLANKTON

ON-WATER

Description

- Offshore waters are those where the water depth is > 30 feet (10 meters) with no surrounding land.
- Evaluation of environmental impacts to open water habitats is focused on water column organisms and those which inhabit or use the sea surface.
- Animals include marine mammals, sea turtles, pelagic birds, and many commercially and recreationally important fish and pelagic invertebrates.
- Organism densities in this habitat are low on average.
- Localized high densities can occur in areas such as convergence zones and upwelling areas.
- Pelagic birds are at greatest risk when large numbers are concentrated for feeding, migration, overwintering, or breeding.
- Biological resources in the water column are less vulnerable to spills than those at the water surface.
- The sea surface microlayer is important for biochemical processes; the organisms most vulnerable to exposure are poor or passive swimmers (planktonic forms).

Predicted Oil Behavior

- Spilled oil transport is controlled more by wind and ocean currents than by tides and mixing with freshwater outflows.
- Most of the soluble and toxic components of the spilled oil are lost through weathering within hours and days.
- Dissolved or dispersed oil concentrations are likely to be greatest in the top few meters.

Response Considerations

- Response activities are focused on removing oil from the water surface.
- Spill response is not conducted from a shoreline, but from water-based vessels or aircraft.
- Weather and sea conditions can significantly hamper response operations.
- Category V oils are likely to submerge and most of the response methods can only be used on the surface of the water.
- Special equipment might be needed for some products (e.g., containment booms which extend at least 9 ft.).
- Use of certain response options is seasonally limited to protect sensitive life histories.

Oil Category Descriptions

I – Gasoline products
II – Diesel-like products and light crudes
III – Medium grade crudes and intermediate products
IV – Heavy crudes and residual products
V – Non-floating oil products

The following categories are used to compare the relative environmental impact of each response method in the specific environment and habitat for each oil type. The codes in each table mean:

A = The least adverse habitat impact.
B = Some adverse habitat impact.
C = Significant adverse habitat impact.
D = The most adverse habitat impact.
I = Insufficient information - impact or effectiveness of the method could not be evaluated.
— = Not applicable.

Response Method	Oil Category I	II	III	IV	V
Natural Recovery	A	A	B	B	B
Booming-Containment	–	A	A	A	–
Booming-Deflection/Exclusion	A	A	A	A	–
Skimming	–	A	A	A	–
Physical Herding	B	B	B	B	–
Manual Oil Removal/Cleaning	–	–	–	–	–
Sorbents	–	B	B	B	–
Debris Removal	–	A	A	A	–
Dispersants	B	A	A	A	–
Emulsion-treating Agents	–	B	B	B	–
Elasticity Modifiers	–	B	B	–	–
Herding Agents	–	B	B	–	–
Solidifiers	–	B	B	–	–
In-situ Burning	–	A	A	A	–

Consult the *Environmental Considerations for Marine Oil Spill Response* document referenced on page 5 before using this table.